

IN THE CLAIMS

1. (Cancelled)
2. (Currently Amended) The system of claim 18 wherein the sensor comprises:
at least one switch comprising a first plate and a second plate;
wherein leaking uncirculated fluid within the stack leak containment member serves
forms an electric current path between the first plate and the second plate; and
a controller associated with the switch, the controller capable of sensing presence or
absence of the current path.
3. (Previously Presented) The system of claim 2 wherein the sensor further
comprises:
a resistor connected in parallel to the switch.
4. (Previously Presented) The system of claim 2 wherein the at least one switch
comprises a plurality of switches connected in parallel.
5. (Currently Amended) The system of claim 18, the plurality of stacked cells
comprising at least two vertically stacked assemblies of stacked cells, with each assembly
including a corresponding stack leak assembly-containment member;
wherein at least one upper stack leak containment member associated with an upper
assembly of the at least two stacked assemblies includes an overflow opening
which directs an overflow of the uncirculated electrolytic fluid into a lower
stack leak containment member associated with a lower of the at least two
stacked assemblies.
6. (Currently Amended) The system of claim 5 wherein the upper and lower
stack leak containment members include corresponding sensors for detecting presence of an
uncirculated electrolytic fluid.
- 7-10. (Cancelled)
11. (Currently Amended) The leak detection system of claim 18 wherein the
controller includes a means for signaling the condition of the sensor to a user.
- 12-17. (Cancelled)

18. (Currently Amended) A leak detection system for a flowing electrolyte battery having a housing and a plurality of stacked cells within the housing, and electrolytic fluid flowing/circulating through the interior of the stacked cells, the system comprising:

- a stack leak containment member within the housing, the stack leak containment member disposed underneath of and surrounding at least a portion of exterior to the plurality of stacked cells, the stack leak containment member collecting electrolytic fluid leaking from the plurality of stacked cells; and
- a sensor disposed in a space between the interior of the stack leak containment member and exterior to the stacked cells, the sensor detecting the presence of uncirculated electrolytic fluid in the space between the interior of the containment member and the exterior of the stacked cells when the uncirculated electrolytic fluid contacts the sensor.

19. (Previously Presented) The leak detection system of claim 18, wherein the sensor comprises resistivity measurement circuitry.

20. (Previously Presented) The leak detection system of claim 19, further comprising:

- leak detection logic, the leak detection logic in electrical communication with the resistivity measurement circuitry;
- wherein, the leak detection logic determines the presence of uncirculated electrolytic fluid based, at least in part, on the output of the resistivity measurement circuitry.

21. (Currently Amended) A leak detection system for a flowing electrolyte battery having a reservoir containing electrolytic fluid, comprising:

- a reservoir leak containment member disposed underneath and exterior to the reservoir, the reservoir leak containment member collecting electrolytic fluid leaking from the reservoir; and
- a sensor disposed in a space between the interior of the reservoir leak containment member and exterior to the reservoir, the sensor detecting the presence of uncirculated electrolytic fluid in the space between the interior of the reservoir leak containment member and the exterior of the reservoir.

22. (Currently Amended) The system of claim 18, comprising:

an electrolyte reservoir for supplying electrolytic fluid to the plurality of stacked cells, said electrolyte reservoir having a reservoir leak containment member disposed underneath and exterior to the electrolyte reservoir, and a reservoir sensor disposed in a space between the interior of the reservoir leak containment member and the exterior to the electrolyte reservoir, the reservoir sensor detecting the presence of fluid in the space between the interior of the reservoir leak containment member and the exterior of the electrolyte reservoir.

23. (Currently Amended) The system of claim 22, wherein the stack leak containment member ~~associated with the plurality of stacked cells~~ is located above the ~~electrolyte reservoir~~ leak containment member and includes an overflow opening which directs an overflow of the electrolytic fluid into the reservoir leak containment member disposed underneath the stack leak containment member.